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EXAMINER
RUDY, ANDREW J

ART UNIT	PAPER NUMBER
3687	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *17 September 2008 and 06 October 2008*.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1,2,4-8,10-17,19-23 and 25-34* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1,2,4-8,10-17,19-23 and 25-34* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a) ☐ All   b) ☐ Some * c) ☐ None of:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____.

       3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1, 2, 4-8, 10-17, 19-23 and 25-34 are pending. Applicant cancelled

claims 3, 9, 18 and 24.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over

U.S. Patent Application Publication No. 2001/0032109 to Gonyea et al. in view of

U.S. Patent No. 6,608,666 to Deguchi et al., U.S. Patent No. 4,404,641 to Bazarnik

and U.S. Patent No. 6,618,692 to Takahashi et al., and further in view of Suyehira,

US 6,947,161.

Gonyea discloses, e.g. Figs. 1-7 and related text, a plurality of computers, e.g.

10, 15, a network, e.g. 13, a parts system, operating time components, e.g. 44, step

72, and corresponding method, for maintaining at least one part constituting a

portion of a processing system, an identification process, e.g. 156, the part system

comprising at least one processing system (0013, lines 1-9), a factory-side system

(0013, lines 1-9) comprising a preset means for storing at least two stage limit value

levels corresponding to at least one of a predetermined allowable operation limit and a predetermined number of operations of the part (0020, lines 1-5 and 0050, lines 1-2), a measuring means for measuring at least one of actual operation time and a number of actual operations of the part (0021, lines 10-13), and a maintenance judging means for judging operation conditions associated with the part by comparing at least one of the actual operation time and the number of actual operations of the part with at least one of the predetermined allowable operation time and the predetermined number of operations of the part to determine whether an order processing request for the part is desired (0005, lines 14-21 and 0055, lines 1-13) and a factory-side sending/receiving means (0015, lines 5-7 and 0017, lines 1-7).

Gonyea also discloses that the maintenance judging means compares at least one of the actual operation time and the number of actual operations of the part to a first stage limit value level and a second stage limit value level, and if the at least one of the actual operation time and the number of actual operations of the part is at least equal to the first stage limit value level, the maintenance judging means generates a part ordering processing request (0050, lines 15-21) and if the at least one of the actual operation time and the number of actual operations of the part is at least equal to the second stage limit value level, the maintenance judging means carries out a notice processing indicating the need for repairing said part (0050, lines 2-15).

Gonyea also discloses that the factory-side system estimates the time when the level reaches the second stage limit value level and if said factory-side system judges that the part can be made available by that time and a periodic maintenance of said semiconductor processing system is scheduled by that time, maintenance schedule information for inputting the exchange of the part into a periodic maintenance schedule is input into the next periodic maintenance schedule and updates said periodic maintenance schedule (0027, lines 29-37).

Gonyea discloses that the preset means of said factory-side system stores normal operation time and its allowable limit value for comparison, in order to perform estimation, (0021, lines 13-16) or cumulative time-passage change and its allowable limit value for comparison (0027, lines 9-11).

As noted above, the invention of Gonyea teaches many of the features of the claimed invention and while the invention of Gonyea does teach a wide variety of processing systems as well as communication to and from a vendor with the vendor carrying out part order processing based on a request from a factory-side system, Gonyea does not specifically indicate that the system be a parts management system with a plasma processing apparatus.

Deguchi teaches a part system for maintaining at least one part constituting a portion of a semiconductor processing system (column 6, lines 9-17), the part maintenance system comprising: at least one semiconductor processing system (column 6, lines 9-17), a factory-side system (column 6, lines 40-42) comprising a factory-side server connected to the at least one semiconductor processing system

via a first private communication network (i.e. LAN) (column 6, lines 42-51), the

factory-side server comprising a factory-side sending/receiving means connected to

the factory-side server via the first private communication network (column 6, lines

42-51); and a vendor-side system comprising a vendor-side sending/receiving

means connected to the factory-side sending/receiving means via a public

communication network (i.e. Internet) (column 6, lines 19-21, 36-39, and 51-54), and

a vendor-side server connected to the vendor-side sending/receiving means via a

second private communication network (i.e. LAN) (column 6, lines 30-35), wherein

the factory-side sending/receiving means comprises a security measure configured

to inhibit unauthorized transfer of data between the factory-side server and the

public communication network (column 6, lines 37-39), wherein the vendor-side

sending/receiving means comprises a security measure configured to inhibit

unauthorized transfer of data between the vendor-side server and the public

communication network (column 6, lines 56-58).

It would have been obvious to one having ordinary skill in the art to modify the

invention of Gonyea to specifically indicate that the system be a semiconductor

processing system with a private communication network and that the vendor be

part of a vendor-side system comprising a private communication network and a

vendor-side sending/receiving means which sends and receives information to and

from said factory-side system through a network, as taught by Deguchi, because the

combination would have allowed greater utility in the invention of Gonyea by

providing application to a wider variety of environments and, as suggested by

Deguchi, provided a corresponding means for communicating with the vendor of

Gonyea with improved accessibility by allowing access to the vendor remotely

(column 7, lines 10-22) while allowing remote monitoring to provide rapid problem

correction (column 7, lines 46-52).

It is noted that it has been held that a recitation of the intended use of the

claimed invention must result in a structural difference between the claimed

invention and the prior art in order to patentably distinguish the claimed invention

from the prior art. If the prior art structure is capable of performing the intended use,

then it meets the claim (See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re

Otto*, 136 USPQ 458, 459 (CCPA 1963)). In the instant case, the structure of

Gonyea is capable of performing the monitoring of any of a plurality of processing

systems including a plasma processing system, and therefore meets the claimed

limitation.

Also, since Gonyea teaches that the factory-side performs the maintenance

scheduling operation rather than the vendor-side and Deguchi teaches remote

maintenance by the vendor-side, the combination would have performed the

maintenance scheduling operation of Gonyea at the vendor-side.

As noted above, the invention of Gonyea and Deguchi teaches many of the

features of the claimed invention, and while the invention of Gonyea and Deguchi

does teach a factory-side system that determines a cumulative operation time of a

part for comparison with a two stage limit, the combination does not specifically

indicate that the cumulative operation time is determined by a counter for the part.

Also, while the invention of Gonyea and Deguchi does teach providing security

measures at both the factory-side and vendor-side for inhibiting external access (i.e.

unauthorized data transfer), the combination does not specify that the security

measure is a firewall.

Bazarnik teaches a maintenance monitor that automatically advises that

maintenance of a device should be undertaken (column 1, lines 5-8) including a

counter corresponding to a specific part (column 1, lines 66-68) wherein the counter

accumulates operation time for comparison to a two stage limit (column 2, lines 3-9).

Takahashi teaches a remote diagnostic system and method for semiconductor

manufacturing equipment comprising a plurality of servers coupled to the Internet via

respective firewalls (column 6, lines 24-42).

It would have been obvious to one having ordinary skill in the art to modify the

invention of Gonyea and Deguchi to specifically indicate that the cumulative

operation time is determined by a counter for the part, as taught by Bazarnik,

because Bazarnik suggests a well-known means for accumulating time that would

be required to determine the accumulated time in the invention of Gonyea and

Deguchi as well as reduce the occurrence of machine damage by disabling the

machine when the maintenance must be performed (column 1, lines 54-61 and

column 2, lines 3-9). Further, since Gonyea and Deguchi teaches processing

cumulative time with a processing server (Gonyea; 0005, lines 14-21 and 0055, lines

1-13) and connecting the processing server to the manufacturing equipment via the

first private communication network (Deguchi; column 6, lines 45-51 and Figure 5)

and Bazarnik teaches determining the cumulative time with a counter, the combination would have communicated the value counted by the counter to the processing server via the first private communication network.

It would have been obvious to one having ordinary skill in the art to modify the invention of Gonyea and Deguchi to specify that the security measure is a firewall, as taught by Takahashi, because, as is recognized by one having ordinary skill in the art, Takahashi suggests a corresponding well-known security measure for inhibiting access that would have improved the applicability of Gonyea and Deguchi by performing the security process using common methods (column 6, lines 24-42).

Suyehira teaches systems and methods for automatic status tracking of automatically ordered replacement components for printing devices, or other devices relating to other technologies (column 3, lines 41-51), comprising communication between a client-side and vendor-side over a network (column 4, lines 37-56) for ordering a replacement part (column 5, lines 8-17) wherein an estimation is made of the time period required to reach a time limit value (column 7, lines 8-15). Suyehira further teaches that if the system judges that the replacement part cannot be made available by said time period required to reach the time limit, the system judges that a different maintenance event can be performed (column 3, lines 4-10 and column 7, lines 50-56). To have the system to be of a common knowledge plasma processing apparatus that tracks the identification (ID) of parts in separate databases would have been obvious to one of ordinary skill in the art as an obvious

substitution/tracking of parts at various stages of the parts life cycle has been common knowledge in the inventory tracking art.

Further, it would have been obvious to one having ordinary skill in the art to modify the invention of Gonyea, Deguchi, Bazarnik, and Takahashi to use an estimation of the time period required to reach the second stage limit and provide a provision for when the replacement part cannot be available by the time period, as taught by Suyehira, because the combination of Gonyea, Deguchi, Bazarnik, and Takahashi does set a replacement limit requiring a maintenance event that occurs prior to the actual expiration of the part being maintained in order to avoid such expiration (Gonyea; 0027, lines 27-37) and the combination, as suggested by Suyehira, would have provided a means for determining the time until actual part expiration for use in determining whether or not the replacement part will arrive before the expiration. Therefore, the combination would provide the user with sufficient time to take corresponding action, such as maintenance, to continue to prevent part expiration (column 3, lines 4-10 and column 7, lines 50-56).

Applicant's September 17, 2008 and October 6, 2008 REMARKS have been reviewed, but are not convincing. It is noted Applicant's claim language is replete with intended use claim language, e.g. claim 1, line 3, "for a user," that is given little, if any, patentable weight in juxtaposition with positively recited claim language, e.g. claim 1, line 1, "a communication network." The above noted combination is deemed able to perform the intended claim use language.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and

any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing

date of the advisory action. In no event, however, will the statutory period for reply

expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Andrew Joseph Rudy whose telephone number is

571-272-6789. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Matthew S. Gart can be reached on 571-272-3955. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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Should you have questions on access to the Private PAIR system, contact the

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assistance from a USPTO Customer Service Representative or access to the

automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-

272-1000.

/Andrew Joseph Rudy/
Primary Examiner, Art Unit 3687